individual imaging aberations of the respective sub-beam with respect to the desired target position and/or position the sub-beam during a writing process on the substrate surface, and

wherein for each sub-beam the respective aperture of the first of the at least one aperture plate defines the size and shape of the sub-beam cross-section and the multibeam optical system [produced] produces an image of said aperture on the substrate surface.

REMARKS

Applicant has just noticed an error in claim 1 and is correcting same as indicated above.

Respectfully submitted,

Reg. No. 24,542

Dated: May 26, 2001.

VIGIL & ASSOCIATES 836 South Northwest Highway Barrington, ILLINOIS 60010 Telephone: (847) 382-6500 (847) 382-6895.

Facsimile:

Clean Copy Of Claims Mailed To The Office On May 29, 2001

1. (Amended) An apparatus for multibeam lithography by means of electrically charged particles, comprising an illumination system having a particle source, the illumination system producing an illuminating beam of said electrically charged particles, and a multibeam optical system positioned after the illumination system as seen in the direction of the beam, said multibeam optical system comprising at least one aaperture plate having an array of a plurality of apertures to form a plurality of sub-beams, wherein the multibeam optical system focuses the sub-beams onto the surface of a substrate,

wherein for each sub-beam a deflection unit is provided, said deflection unit being positioned within the multibeam optical system and adapted to correct individual imaging aberations of the respective sub-beam with respect to the desired target position and/or position the sub-beam during a writing process on the substrate surface, and

wherein for each sub-beam the respective aperture of the first of the at least one aperture plate defines the size and shape of the sub-beam cross-section and the multibeam optical system produces an image of said aperture on the substrate surface.